UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,025	07/02/2003	Kevin T. Chan	14885US01	5831

23446   7590   07/21/2008

MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER
DAVENPORT, MON CHERI S

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
07/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 April 2008</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-30</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   **Claims 1, 11, and 21** rejected under 35 U.S.C. 102(b) as being anticipated by

applicant's admitted prior art.

Regarding **claim 1, 11, and 21** Bontemps et al. discloses a method for providing

and configuring secure communication links, the method comprising:

determining any one usable media pair from all existing media pairs of a first

device(see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the

media pairs to channels, therefore a usable media pair is determined from all existing

media pairs, see also [12], and fig. 1, the first controller and the second controller is

independent and all existing media pair for each controller is independent devices) :

selecting any one channel from all existing channels, said selected any one

channel being different from a general channel assignment corresponding to said

determined any one usable media pair (see [04], lines 1-6, auto-MDIX reconfigure

channels to properly reassign the media pairs to channels, therefore a channel is

determined from all existing channels , see also [12], and fig. 1, the first controller and

the second controller is independent and all existing channels for each controller is

independent); and

assigning said selected any one channel to said any one media pair (see [04], lines

1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels) .

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 2-10, 12-20, and 22-30** rejected under 35 U.S.C. 103(a) as being

unpatentable over Applicant's admitted prior art in view of Bontemps et al. (US Patent

5,923,663).

Regarding **Claims 2, 12 and 22**, Applicant's admitted prior art discloses

everything as claimed above (see claims 1, 11 and 21).

However applicant's admitted prior art fails to specifically point out notifying a

second device of said assigned any one channel which corresponds to said any one media

pair as claimed.

Bontemps et al. teaches notifying a second device(DFF, figure 4) of said assigned

any one channel which corresponds to said any one media pair (see figure 4, section

DFF(D-type flip-flop),see col. 13-14, lines 60-2, the DFF asserts the Xover_sel1 signal

at its output, it receives the assignment signal xover_sel).

Therefore it would have been obvious to one with ordinary skill in the art at the

time the invention was made to combine applicants admitted prior art with Bontemps et

al. because Bontemps et al. invention provides a solution to achieve the appropriate

communication link automatically regardless of cable type(see Bontemps et al. col. 3,

lines 39-41).

Regarding **Claims 3, 13 and 23,** Applicant's admitted prior art in view of

Bontemps et al. discloses everything as claimed above (see claims 2, 12 and 22).

However applicant's admitted prior art fails to specifically point out cross-

connecting a corresponding channel and media pair for said second device, said cross-

connected channel and media pair being equivalent to said selected any one channel

assigned to said any one media pair as claimed.

Bontemps et al. teaches cross-connecting a corresponding channel and media pair

for said second device, said cross-connected channel and media pair being equivalent to

said selected any one channel assigned to said any one media pair (see col. 13, lines 9-28,

table of crossover configurations) .

Therefore it would have been obvious to one with ordinary skill in the art at the

time the invention was made to combine applicants admitted prior art with Bontemps et

al. because Bontemps et al. invention provides a solution to achieve the appropriate

communication link automatically regardless of cable type(see Bontemps et al. col. 3,

lines 39-41).

Regarding **Claims 4, 14, and 24**, Applicant's admitted prior art discloses

everything as claimed above (see claims 1, 11, and 21).

However applicant's admitted prior art fails to specifically point out negotiating said assignment of said selected any one channel to said any one media pair as claimed.

Bontemps et al. teaches negotiating said assignment of said selected any one channel to said any one media pair (see col. 14, lines 46-53, the DFF is in toggle mode, toggling (reads on negotiating) the xover_sel1 signals)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 5, 15, and 25**, Applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21).

However Applicant's admitted prior art fails to specifically point out selecting from a plurality of predetermined channel and media pair assignments, a particular one of said channel and media pair assignment as claimed.

Bontemps et al. teaches selecting from a plurality of predetermined channel and media pair assignments, a particular one of said channel and media pair assignment *(see col. 14, lines 46-53, the link_detect1 signal is asserted, which detects a valid communication link, selected)*

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine applicants admitted prior art with Bontemps et

al. because Bontemps et al. invention provides a solution to achieve the appropriate
communication link automatically regardless of cable type(see Bontemps et al. col. 3,
lines 39-41).

Regarding **Claims 6, 16, and 26**, Applicant's admitted prior art discloses
everything as claimed above (see claims 1, 11, and 21).

However applicant's admitted prior art fails to specifically point out designating a
first combination of said channel assigned to said any one media pair as a communication
channel and media pair, designating a second combination of said channel assigned to
said any one media pair as a control channel and media pair as claimed.

Bontemps et al. teaches designating a first combination of said channel assigned
to said any one media pair as a communication channel and media pair (see col. 13, 9-29,
channel assignments, as shown in table 6, see figure 3 and 4, see col. 12, lines 56-67, the
select logic select the first and second contacts , designating a channel assignment); and

designating a second combination of said channel assigned to said any one media
pair as a control channel (figure 4, DFF) and media pair (port1-n, connected to media
pair)(see col. 13, lines 25-29, the QS3390 quick switch is used to implement the select
logic(to complete the straight through and crossover connections), see also col. 13-14,
lines 67-5, the DFF within all the ports1-n assure all the muxes of the select logic are in
the same phase (which reads on the DFF is the control channel of the select logic,
controlling the straight through and crossover connection).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 7, 17 and 27**, Applicant's admitted prior art in view of Bontemps et al. discloses everything as claimed above (see claims 6, 16 and 26).

However applicant's admitted prior art fails to specifically point out securely transferring communication traffic via said communication channel and media pair as claimed.

Bontemps et al. teaches securely (reads on working) transferring communication traffic via said communication channel and media pair (see col. 15, lines 20-24, the automatic media detection circuit, establishes a working communication link).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 8, 18, and 28,** Applicant's admitted prior art in view of Bontemps et al. discloses everything as claimed above (see claims 7, 17, and 27).

However applicant's admitted prior art fails to specifically point out securely transferring control information via at least one of said communication channel and media pair as claimed.

Bontemps et al. teaches securely transferring control information via at least one of said communication channel and media pair (see col. 13, lines 29-45, control information is XOVER_SELx and LINK_DETECTx signals).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 9, 19 and 29,** Applicant's admitted prior art in view of Bontemps et al. discloses everything as claimed above (see claims 8, 18, and 28).

monitoring at least one of said communication channel and media pair by a second device (see [06] lines 1-4, Ethernet@wirespeed is adapted to detect the conditions on the media and the coupling interface, media pairs are monitored)) ; and

determining said selected any one channel assigned to said any one media pair(see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels)

Regarding **Claims 10, 20 and 30**, Applicant's admitted prior art in view of Bontemps et al. discloses everything as claimed above (see claims 9, 19, and 29).

However applicant's admitted prior art fails to specifically point out said control information is at least one of authentication information, encryption information, channel setup information and link provisioning and link maintenance information as claimed.

Bontemps et al. teaches said control information is at least one of authentication information, encryption information, channel setup information and link provisioning and link maintenance information(see col. 29-36, the control information LINK_DETECTx and XOVER_SELx, provide channel setup and link information).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Response to Arguments

5.   Applicant's arguments with respect to claims 1, 11, and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MON CHERI S. DAVENPORT whose telephone number is (571)270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Seema S. Rao/
Supervisory Patent Examiner, Art Unit
2616

/Mon Cheri S Davenport/
Examiner, Art Unit 2616
July 16, 2008